







How to change front lower arm on BMW E46 convertible – replacement guide



**VIDEO TUTORIAL** 

#### (i) Important!

This replacement procedure can be used for: BMW 3 (E46) 318 i, BMW 3 Compact (E46) 318 ti, BMW 3 Convertible (E46) 318 Ci, BMW 3 Coupe (E46) 318 Ci, BMW 3 Touring (E46) 318 i

The steps may slightly vary depending on the car design.

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### REPLACEMENT: FRONT LOWER ARM – BMW E46 CONVERTIBLE. LIST OF THE TOOLS YOU'LL NEED:



- Wire brush
- WD-40 spray
- Copper grease
- Combination spanner #18
- Combination spanner #19
- Combination spanner #21
- Drive socket # 13
- Drive socket # 18
- Wheel impact socket #17
- Ratchet wrench

- Torque wrench
- Ball joint puller
- 3-Arm Gear Puller
- Phillips screwdriver
- Crow bar
- Rubber mallet
- Vice
- Hydraulic transmission jack
- Wheel chock

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## Replacement: front lower arm – BMW E46 convertible. Professionals recommend:

- The replacement procedure is identical for the left and right lower control arms.
- Replacement of the independent suspension lower arm in some cars requires a part of the outlet piping of the additional heater to be removed.
- All work should be done with the engine stopped.

### REPLACEMENT: FRONT LOWER ARM – BMW E46 CONVERTIBLE. RECOMMENDED SEQUENCE OF STEPS:

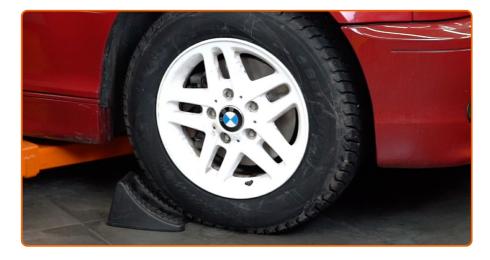
1



Secure the wheels with chocks.

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Loosen the wheel mounting bolts. Use wheel impact socket #17.

3



Raise the front of the car and secure on supports.

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Unscrew the wheel bolts.

#### AUTODOC recommends:

Important! Hold the wheel while unscrewing the fastening bolts.
 BMW E46 convertible

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Remove the wheel.

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Unscrew the fasteners of the lower sound insulation. Use a Phillips screwdriver.

7



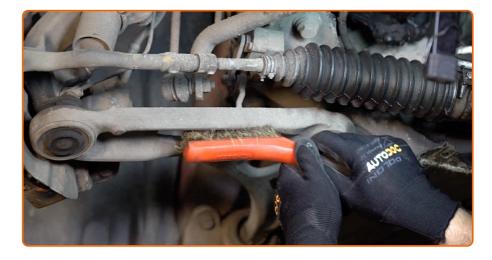
Remove the lower sound insulation.

#### Please note!

• Some cars are not equipped with the lower sound insulation.

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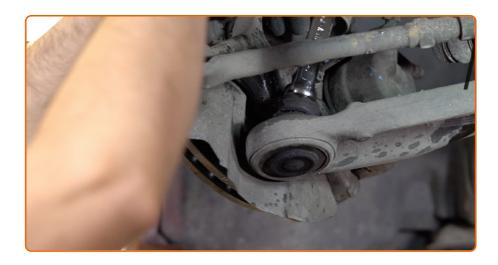


Clean all joints of the arm. Use a wire brush. Treat all joints of the arm. Use WD-40 spray.

#### Replacement: front lower arm – BMW E46 convertible. Tip:

- After applying the spray, wait a few minutes.
- Wear protective goggles.

9



Loosen the fastener connecting the ball joint to the steering knuckle. Use a combination spanner #19.

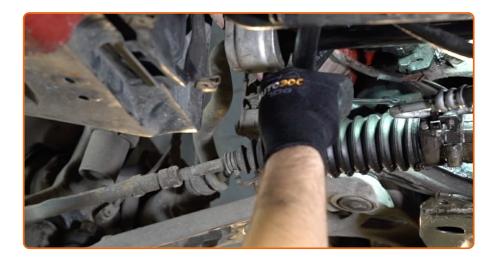
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Detach the fastener connecting the suspension level sensor to the suspension control arm. Use a drive socket #13. Use a ratchet wrench.

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Unscrew the arm fastening from the subframe. Use a combination spanner #21.

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Unscrew the rear arm fastening. Use a drive socket #18. Use a combination spanner #18. Use a ratchet wrench.

13



Unscrew the ball joint fastening to the steering knuckle. Use a combination spanner #19.

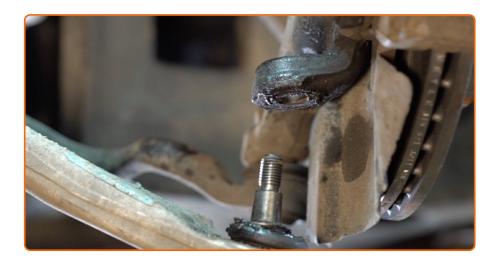
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Disconnect the ball joint from the steering knuckle. Use a ball joint puller.

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Disconnect the lower arm from the steering knuckle.

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Prop up the steering knuckle. Use a hydraulic transmission jack.

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Remove the arm. Use a crowbar.

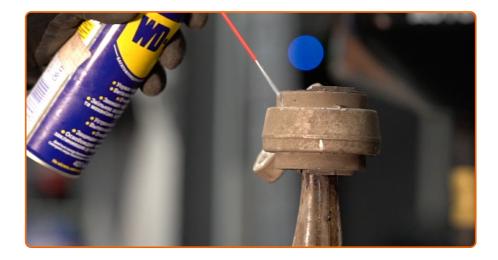
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Grip the suspension control arm in a vice.

19



Treat the control arm bush. Use WD-40 spray.

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Remove the control arm bush. Use 3-Arm Gear Puller.

21



Loosen the vice and remove the control arm.

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Grip the new control arm in a vice.

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Treat the mounting seat of the control arm bush. Use WD-40 spray.

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Install the control arm bush to its mounting seat. Use a rubber mallet.

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Loosen the vice and remove the control arm.

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Clean the mounting seats and the thread of the suspension arm. Use a wire brush. Use WD-40 spray.

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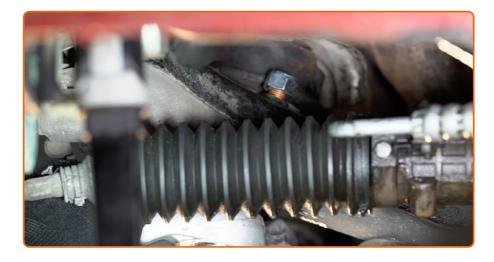
Install a new arm.

# Replacement: front lower arm — BMW E46 convertible. Tip from AUTODOC experts:

- During the installation process, use only new bolts and nuts.
- Do not damage the ball joint cover.

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Install the control arm fasteners.

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Screw the fastener connecting the control arm to the subframe. Use a combination spanner #21.

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Screw the rear arm fastener. Use a drive socket #18. Use a combination spanner #18. Use a ratchet wrench.

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Insert the ball joint into the steering knuckle and fix it with a new nut.

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Remove the support from under the steering knuckle.

#### **AUTODOC** recommends:

 Replacement: front lower arm – BMW E46 convertible. Lower the transmission jack smoothly, without jerks, to avoid damaging components and mechanisms.

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Support the arm. Use a hydraulic transmission jack.

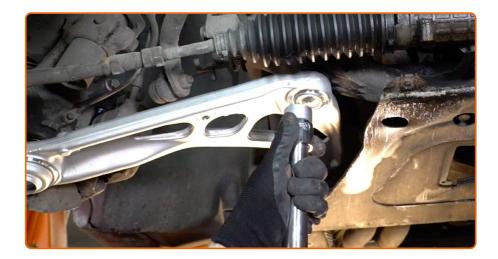
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Tighten the arm fastening to the subframe. Use a combination spanner #21. Use a torque wrench. Tighten it to 84 nm torque.

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Lower the hydraulic transmission jack by 10-15 cm.

## Replacement: front lower arm – BMW E46 convertible. AUTODOC recommends:

• Lower the hydraulic transmission jack smoothly, without jerks, to avoid damaging assemblies and mechanisms.

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Support the arm. Use a hydraulic transmission jack.

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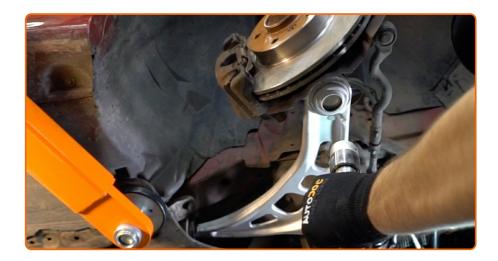
Tighten the ball joint fastening nut. Use a combination spanner #19. Use a torque wrench. Tighten it to 55 nm torque.

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Tighten the rear fastener of the control arm. Use a drive socket #18. Use a combination spanner #18. Use a torque wrench. Tighten it to 59 nm torque.

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Remove the support from under the arm.

#### **AUTODOC** recommends:

• BMW E46 convertible – Do not lower the transmission jack sharply to avoid damaging components and mechanisms of the car.

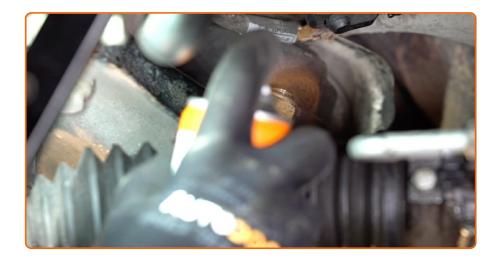
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Attach the fastener connecting the suspension level sensor to the suspension control arm. Use a drive socket #13. Use a ratchet wrench.

41



Treat all joints of the arm. Use copper grease.

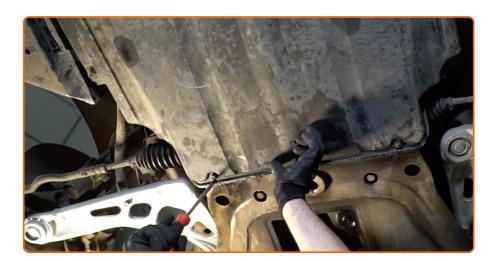
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Install the lower sound insulation.

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Screw in the fasteners of the lower sound insulation. Use a Phillips screwdriver.

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Treat the surface where the brake disc contacts the wheel rim. Use copper grease.

45



Install the wheel.

# Replacement: front lower arm — BMW E46 convertible. Tip from AUTODOC experts:

 To avoid injury, hold up the wheel when screwing in the fastening bolts.

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Screw in the wheel bolts. Use wheel impact socket #17.

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Lower the car and working in a cross order, tighten the wheel bolts. Use a torque wrench. Tighten it to 120 nm torque.

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Remove the jacks and chocks.

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## DID YOU FIND THESE INSTRUCTIONS HELPFUL?

YES

NO

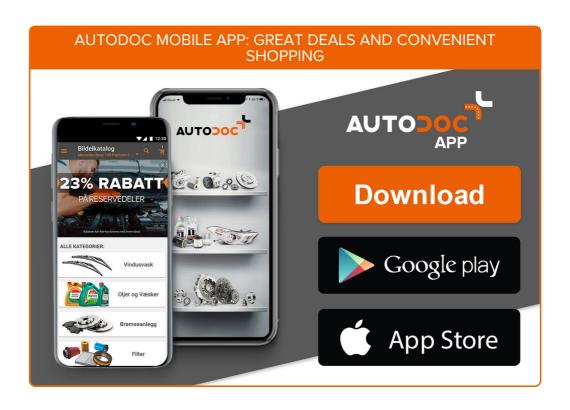


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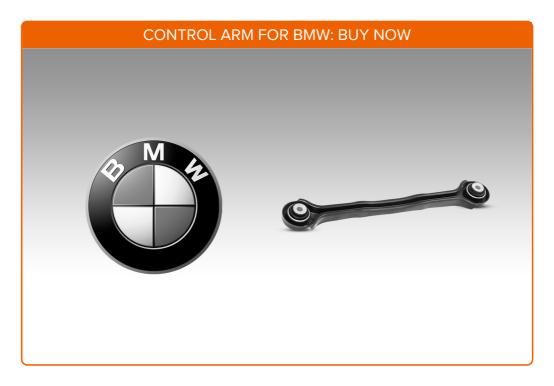




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